

CORRECTED VERSION

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
18 August 2005 (18.08.2005)

PCT

(10) International Publication Number  
**WO 2005/075748 A1**

(51) International Patent Classification<sup>7</sup>: **E02D 5/08**

(21) International Application Number:  
PCT/KR2005/000332

(22) International Filing Date: 4 February 2005 (04.02.2005)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:  
10-2004-0007691 5 February 2004 (05.02.2004) KR

(71) Applicant (for all designated States except US): **CON-KEYNET CO., LTD.** [KR/KR]; 9F, Korea Veterans Association Bldg., 7-13, Sinchoen-Dong, Songpa-Gu, Seoul 138-792 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **KIM, Kwang-Man** [KR/KR]; 22-1408, Jangmi Apt., 11, Sinchoen-Dong, Songpa-Gu, Seoul 138-240 (KR). **YUN, Sang-Mun**

[KR/KR]; 101-905, Dongah-hangaram Apt., Pungnap-Dong, Songpa-Gu, Seoul 138-040 (KR).

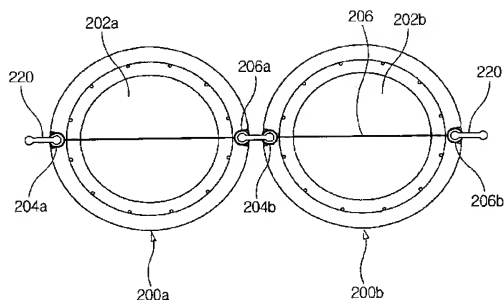
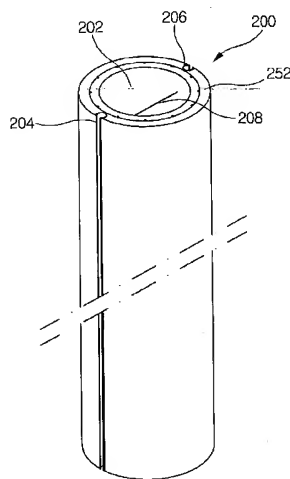
(74) Agent: **KWON, Hyuk-Sung**; 12F, Seo-Jeon Bldg., 1330-9, Seocho-Dong, Seocho-Gu, Seoul 137-070 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: **PHC PILE USED IN PERMANENT RETAINING WALL STRUCTURE AND CONNECTION METHOD OF PHC PILE**



(57) Abstract: The present invention relates to a PHC pile used in a permanent retaining wall structure, and a connection method thereof, and more particularly, to a method of connecting PHC piles to each other by inserting a connection bar into connection pipes embedded in sheaths of the PHC piles. To this end, the PHC pile comprises a left connection pipe installed at one side of the sheath of the PHC pile and a right connection pipe embedded at the other opposite side of the sheath. Further, the method of connecting the PHC pile to each other comprises the steps of inserting a waterproof material into inner semi-cylindrical grooves of the connection pipes, inserting the connection bar between the connection pipes of the PHC piles, and consecutively connecting a plurality of PHC piles to one another by repeating the above steps.

WO 2005/075748 A1



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— *with international search report*

**(48) Date of publication of this corrected version:**

2 February 2006

**(15) Information about Correction:**

see PCT Gazette No. 05/2006 of 2 February 2006, Section II

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*